

## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <a href="http://about.jstor.org/participate-jstor/individuals/early-journal-content">http://about.jstor.org/participate-jstor/individuals/early-journal-content</a>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

4th. That the Apostles', Nicene, and Athanasian creeds are true expositions of Christian doctrine.

These doctrines being, as we believe, common ground on which the two churches are agreed, cannot be dis-

when the two chirches are agreed, cannot be disputed in our pages.

What the Holy, Apostolic, Catholic Church consists of, will, of course, be a matter to be discussed, as also, in due time, each of the peculiar doctrines adopted by the Church of Rome, and disputed by that of England.

Should our challenge be declined, Catholic laymen cannot ascribe it to either of the grounds mentioned, and will, of course, be at liberty to draw their own conclusions as to the true reasons of such refusal; but we shall not the less steadily proceed to analyze the controversy, and show what has been said by the ablest writers on both sides, in as short and simple a manner as the sub-ject will admit. Learned references and collateral mat-ters we shall endeavour to keep distinct from the main body of the argument, that the train of thought and reasoning may be the better followed by any intelligent reasoning may be the better followed by any man, however previously uninstructed in such matters.

To be useful, we must be clear and simple; and we think truth is always capable of being made so. To the learned, however, we shall, we hope, prove ourselves not unlearned, or unmindful of what is due to learning in others. Such matters as savour of mere erudition, or imply a deeper knowledge of the learned languages than ordinary men can be expected to possess, we shall endeavour to place in notes or appendixes, rather than embarrass the main thread of the argument with them. Thus we hope to afford acceptable aid, as well to the learned reader as to the humblest Catholic Christian who is able to read the simple truth, on which his eteral selection must depend nal salvation must depend.

## SHALL ROME HAVE THE EXCLUSIVE CONTROL OF EDUCATION?

SHALL Rome and her priesthood have the exclusive control and direction of education? For three centuries this has been the great controversy of Rome with the nations of Europe. To this end the Inquisition was the nations of Europe. To this end the Inquisition was established; the Society of Jesus was organized and disciplined; the Edict of Nantes was revoked. Silenced for a time by the French Revolution, and the wars consequent on that great convulsion, the same controversy has arisen again in our day, and the struggle has been renewed in every country in Europe. Rome and her priests say, that the preservation of social order, the existence of society itself, is involved in the submission of men's will and reason to their guidance and con-We, on the other hand, assert, that to stay by such means the progress of human intellect, to curb and fetter the minds of men, can be compared only to and return the minds of men, can be compared only to the attempt of the foolish parent, who hopes that by entire seclusion from the world, the child will escape its temptations and passions. The child becomes a man— a new and strange world, full of glittering baubles and delusive pleasures, burst upon him unwarned and unprepared, and the suppressed volcano of his passions at once breaks out and destroys him. We say, that to prepare the mind for future conflicts and temptations, pare the mind for future conflicts and temptations, it is better to let youth traverse every field of knowledge. Let the reason be strengthened; it is the instrument which God has bestowed upon all to enable us to judge between good and evil; and to distrust its power, is to reject and put to open scorn the gift of God. And, above all, we say, that to that reason of man, exercised and diciplined, must be submitted whatsoever claims to regulate his principles and control his actions. That this free, unfettered exercise of man's reason can alone secure social order, we appeal to all reason can alone secure social order, we appeal to all history to prove. Go back, through the history of Europe for the last three centuries, and see if it does not teach us that every country where Rome and her priesthood have completely obtained the exclusive control of education, has not only lost that position in the great European commonwealth once enjoyed, but has become a by-word of past greatness and present degradation. Whilst, on the other hand, with inferior advantages, those countries where the Bible was free, and education was unfettered, have progressed continually in power, and in the arts and sciences. To illustrate

in power, and in the arts and sciences. To illustrate this, is our present object.

It is hardly necessary here to repeat what every student knows, that, down to the fifteenth century, the question of priestly control over education could hardly be said to have arisen. In point of fact, during the preceding ages, all knowledge was confined to the clergy. They alone had leisure and opportunity to master even the elements of learning. The close of the fifteenth century saw all this changed. The discovery of a new world enlarged the bounds of knowledge; and the invention of printing secured the spread and circulation of it. Then came the great burst of human intellect. The European great burst of human intellect. The European nations, at one bound, seemed to have passed from childhood to manhood; and this was not confined to one or two, but extended to all.

First in this great race undoubtedly was Italy. There the light of literature had never been wholly extinguished; but the age of Leo X. saw Italy adorned with

learned men; with warriors and statesmen; with the greatest painters and sculptors of modern times. Nor was the pre-eminence confined merely to the arts and sciences; her courts were the resort of the learned men of Europe; to her great universities, Padua and Bologna, flocked the most distinguished students from every country; her cities were the most prosperous and flourishing in Europe; an extensive commerce had made her merchants princes, and enabled the small republics of Genoa and Venice to cope with the most powerful monarchies. Such was Italy in the fifteenth

At first, Rome, not perceiving the consequences that would result from the general spread of literature and education, encouraged and aided its progress; but soon the Reformation startled her from her security. she saw that education and knowledge endangered her supremacy; and to meet the coming danger, the Jesuits were organized by Loyola, and sanctioned by Rome. obtain complete control over the education of all, and to bind and subjugate the intellects of men into entire submission to Rome, was the great and paramount object of that society; and in Italy they succeeded. For three hundred years the whole education of the Italian mind has been intrusted by Rome to the Jesuits and the priesthood. For three hundred years every channel of knowledge and learning has been closed, except such as the Jesuits and priests have permitted to remain That such is, and has been the case, we would refer to the following passage in Farini's History (vol. I., p. 152). When speaking of the mode of government at Rome, he says—"The Sacred Congregation of Studies, composed of cardinals and of prelates, regulate public education at its discretion. The bishop is the director of instruction in each diocess; the rural dean in each municipality; and in each parish, the incumbent. It is forbidden to any one to teach publicly or privately without the license of the Sacred Congregation, or the approval of the bishop; he, too, presides at the examinations, and frames or approves schemes, regulations, and books for all schools. Every teacher is either actually chosen, or else approved by him, or by Congregation; ecclesiastics preferred to laymen. In Rome the Jesuit Fathers are the sole educators of youth, and in other places they get the preference. It is forbidden to teach political economy; the studies of medicine and jurisprudence jejune and defective. In Bologna there was a school of music; but scientific academies, and those of arts and literature, were all under the control of the Sacred Congregation of Studies. Letters, impoverished by the censorship, and by empty academic insipidities, yielded fruit worth little to the taste and nothing for nourishment. The press was subject to a three-fold censorship. namely, to the Holy Office, by the bishops, and the government."

The above extract represents not merely what is the present position of education in the Papal States, but also what it has been for three centuries, both there and and what it has been for three centuries, both there and in the rest of Italy. And what has been the result? If exclusive control over education by the Romish priesthood does tend to promote true liberty, to advance the well-being of society, and secure from taint and corruption the propole of the procedure of the procedure. the well-being of society, and secure from tains and corruption the morals of the people, what nation in Europe should present such a picture of moral elevation, happiness, and liberty as Italy, and, above all, the Papai States? And what is the case? Without compal States? And what is the case? Without com-merce, without literature; her cities, many of them almost deserted; the grass growing in the streets of Ferrara and Bologna. Bologna, which, in the 14th century, could reckon up her 13,000 students, now century, could reckon up her 13,000 students, now scarcely numbers as many hundreds; her courts of justice sinks of corruption; her native sovereigns retaining the forced allegiance of their subjects by the sword, or by the aid of foreign bayonets. Such is the present political aspect of that once flourishing country. Nor does the moral condition of its people present a more favourable subject for contemplation. Nicbuhr, the historian, who, as diplomatic agent for the King of Prussia, resided for several years at Rome, thus speaks of the Italians in 1820:—"The Italians, as a nation, are walking dead men. True, we must deplore and not hate them; for unavoidable misfortunes have plunged them in their degradation, but the degradation is no less cerin their degradation, but the degradation is no less certain. Intellect and knowledge, any idea which makes the heart throb, all generous activity is vanished from the land. All hope, all aspiration, all effort, even all cheerfulness, for I have never seen a more cheerless nation.

Dr. Arnold, also, who visited Italy in 1840, thus speaks of them:—"Certainly I do greatly prefer France to Italy, Frenchmen to Italians; for a lying people, which these emphatically are, stink in one's moral nose all the day long. Good and sensible men, no doubt, there are here in abundance; but no nation presents so bad a side to a traveller as this. For, whilst we do not see its domestic life and its private fruits and charity, the infinite vileness of its public officers, the gross ig-norance and the utter falsehood of those who must come in your way, are a constant annoyance. When you see a soldier here, you feel no confidence that he can fight. When you see a so-called man of letters, you are not sure that he has more knowledge than a baby. When you

see a priest, he may be a devotee or an unbeliever When you see a judge or a public functionary, justice and integrity may be utter strangers to his vocabulary. It is this which makes a nation vile, whose profession, whether Godward or manward, is no security for per-formance. Now, in England we know that every soldier will fight and every public functionary will be honest and though many of our clergy may be enthusiasts yet we feel sure that none is an unbeliever."

And again, speaking of the Papal government, he says:—"It is impossible not to be sickened with a government such as this, which discharges no one function decently. The ignorance of the people is prodigious. How can it be otherwise? The bookselling shops sad to behold. The very opposite of that scribe instructed in the kingdom of God, who was to bring out of his treasures things new and old These scribes bring out of the contract of the of their treasures nothing but the mere rubbish of the past and present. I could muse long and deeply on the past and present. I could muse long and deeply on the state of this country. Neither do I see, humanly speaking, one gleam of hope. If one evil spirit be cast out, there are but seven others yet more evil, if it may be, ready to enter. Wherefore, I have no sympathy with the so-called liberal party. They are but types of the counter evil of Newmanism. For Newmanism leads to Socialism and Socialism leads to Newmanism, the eternal oscillations of the drunken mima The varying vices and vileness of the slave, and the slave broke loose; half of our virtue is cone, says Homer, when a man becomes a slave; and gone, says Homer, when a man becomes a slave; and the other half goes, when he becomes a slave broken

Such were the observations on the Italians of the present day by two of the most distinguished men who have visited that country in the present century. That the picture thus drawn is not a harsh or unjust one, we think will appear abundantly, when we cite the observations of a distinguished native writer of the present day. Farini, himself an Italian, and, as is evident from his book, a sincere member of the Roman Catholic Church, in page 72 of his work, after speaking of the establishment, by the Papal government of certain bodies, called centurions and Pontifical volunteers, proceeds thus—

These centurions and volunteers obtained their recruits amidst the meanest and most criminal of the peo-ple. They had the privilege of carrying arms; were exempt from certain taxes, and were influenced by fana-ticism, not merely political, but also religious, because certain bishops and priests enrolled and instructed them. In some towns they domineered with brutal ferocity; In some towns they domineered with brutal ferocity; at Faenza, particularly, they scoured the places, in arms to the teeth, like a horde of savages in a conquered country; the police was in their hands, so that they practised insolence and excess with impunity. The country people and servants resisted their masters; they avenged the wrongs of the government, those of religion, those of their sect, and of every member of it; religion, those of their sect, and of every member of it; and they lighted up in Romagna a very hell of frantic passions. I have already told, and I sorrowfully repeat it, how the liberal sects of Romagna had begun, at an early date, to imbrue their hands in the blood of their opponents. The example was fatal; blood brought forth blood. The liberals had treacherously shed it, under the pretext of freedom and patriotism; the centurions were greedy of it for the honour of Mary, and of the Vicar of Christ. Oh, may it please the mercy of God, that all parties may imbibe the persuasion that no enormity is necessary or advantageous to the cause of enormity is necessary or advantageous to the cause of nations, of the masses, or of governments.

Such is the picture, given by a native writer, of the proceedings and conduct of the contending factions in the Papal States.

Again, in another passage, speaking of the government, he says, page 75—

" The Pontifical government seemed to bind bad and good in the same bundle; they said they wished to se-parate the chaff from the corn, but they trampled all without judgment or charity. The judicial departnot rectified, according to promise; codes were not published; an ill-patched penal statute was enacted, in which were merciless punishments for the crimes which were called treasonable, or which might be so construed. There exists a circular of Cardinal Bernetti, in which he orders the judges, in the case of liberals charged with ordinary offences or crimes, in-variably to inflict the severest punishment. The judges seconded all this fierce passion, if they were of the same faction, or else did so from fear or venality. The police were all factious in some places; and an agent of police caused more alarm among the inhabitants than an high-wayman. They would not let the liberals indulge in shooting, or in any other amusement; they refused them passports, pried into their families, and used force against their domiciles and persons with incessant and minute searches. Meanwhile, the administration of the public revenues remained as of old—without method, and without credit; trade, industry, and instruction suffered not only neglect, but discouragement and deterioration.'

Such is the government, and such are the governed, in the States of the Church—the government, a government by Pope, cardinals, and bishops; the governed, the people who, themselves, and their fathers, have been exclusively educated and brought up, from childbood, by the Sacred Congregation of Cardinals and Bishops, and by the Jesuit fathers and teachers.

Now, we ask Roman Catholie laymen, does the picture presented by the foregoing extracts hold out any ture presented by the foregoing extracts hold out any inducement to yield to the claims of Rome's priesthood? Does not the present state of Rome, and of Italy, loudly protest against their pretensions? Will it be said that political causes have produced these results? That Austrian rule has paralyzed the intellect, and destroyed the energies of Italy? That might, indeed, account for the condition of northern Italy; but how can it apply to the Papal States? There, at least, for the last three centuries, Italians have held undisputed sway; not a single foreign Pontiff ever has filled the chair of St. Peter during that period. Will it be said that it is unfavourably situated? A country lying between two great seas, the very centre of civilized Europe; the resort of reaction seems, the very centre of civilized Europe; the resort of travellers from every other land, with a fertile soil, and the most favoured climate. Will it be said that its climate and soil are unfavourable to the growth of manly virtue, energy, and enterprise? All antiquity proclaims the contrary. To what, then, shall we ascribe its condition? We say that it is the natural result of that exdition? We say that it is the natural result of that ex-clusive priestly control over education which is now sought to be forced upon this country: we say that the degradation produced by the slavery of the body is as nothing, compared to the degradation resulting from the slavery of the mind; that there can be no love of truth, where man is forbidden to inquire what is truth; that to prohibit the exercise of man's reason in the higher things relating to "righteousness, temperance, and judgment to come," is to leave him, in all things, to the uncontrolled dominion of the passions and appetites of his lower nature. The priests of Rome, the priests of Bramah, and the priests of Mahommed, all require the will of man, in spiritual matters, to be subjected, without inquiry and without proof, to their rule and governance; but God says, "Prove all things; hold fast that which is good." He does not require us to hold fast even that which is good, until we have first proved it; he does not demand our assent to the truths of the Gospel, unless that assent be grounded on and evidenced by respect to the truths of the Gospel, unless that assent be grounded on and evidenced by reason. Shall we obey God or man? England, and England's Church, long since proclaimed the truth, that that faith is worthless which does not recommend itself to man's reason; that the same God who has given revelation has also endowed man with reason; and, therefore, to suffer it to be opposed to faith would be to make God a liar. Has be opposed to faith would be to make God a har. Has England suffered by this appeal to reason? Is truth less regarded? Is justice less purely administered? Is morality more endangered? Is the social structure less firm? Has England's progress in arms, in arts, and sciences, been retarded? Does the contrast between her present condition, and that of Rome and Italy, afford no subject for deep and earnest thought to every unc present condition, and that of home and many, anoruno subject for deep and earnest thought to every unprejudiced mind? If history be something more than an old almanac—if she be, indeed, philosophy, teaching by examples—does she not teach us, by the example of every European nation, that a free Bible, and an unfettered education, are the only sure and solid foundations on which can rest social order, morality, and religion?

## FARMING OPERATIONS FOR JANUARY. (Extracted from the Irish Furmer's Gazette.)

Winter is far from being a season of inactivity with the farmer. It is during this season that he is engaged in turning to account the results of his labours throughout the rest of the year. His cattle, sheep, and other descriptions of stock are feeding on the roots and hay which he had provided for them, and the produce of his grain crops are being prepared for and taken to market. Besides this, there are certain preparatory operations to be performed, with a view to the coming labours of the spring. Stubble fields have to be ploughed for green crops, and grass fields for grain. We refer, of course, to the well-regulated farm. On too many farms we find that "the dead months" of the year are too truly so, not only as regards the processes of vegetation, but also in so far as the operations of the farm are concerned. The lands which had borne crops of grain during the preceding summer, are allowed to remain in the same state as they were at the removal of the crops, hardened by the rains and by the continued tramping of the cattle, for whose use no store of roots had been provided. We trust, however, that the day is not far distant when such ruinous and unskilful practices shall become unknown in our island, and when the great and important trade of farming will be thoroughly understood by all who are engaged in it.

the great and important trade of farming will be thoroughly understood by all who are engaged in it.

Ploughing Stubbles.—Although we refer to this operation at the present time, it must not be inferred that it may be delayed until this month. This should commence at a much earlier period, say in November; but as these remarks may be read by parties who have not done so at the proper time, we introduce them here. The ploughing of the stubbles, where a proper rotation of crops is followed, is preparatory to the culture of the pulse crops—beans, peas, and vetches; and of the green crops—turnips, carrots, and mangel-wurzel. On soils suited for bean culture, the portion of land intended for

this crop must be ploughed first, at which time farm manure is applied and ploughed down. By so doing, a great amount of labour is saved at a period when every dry hour is precious for getting the seed de-posited, where, perhaps, the season might be entirely lost if the manure was not applied until the time of sowing. Land upon which peas or vetches are to be grown, ought also to be ploughed early, and may or may not be manured at this season; because the former is usually grown without much or any manure, and the latter being sown at intervals, may be manured afterwards. That part of the stubble land intended for potatoes and green crops, is next to be ploughed. The practice of green crops, is next to be ploughed. The practice of manuring on the stubbles (previous to ploughing) for these crops, is followed by many farmers, and we believe that on strong soils it may be done with success particularly where potatoes or carrots are to be grown; because in strong soils, naturally or artificially dry, the manure will not be carried away by the rains, which would be the case in light or open soils; and it is well known that potatoes are more liable to disease when planted among recently-made manure, than when planted on land which had been manured some time previously. For carrots, it is essentially necessary that the manure be ploughed in. There is one great advantage gained by ploughing in manure on lands suitable for so doing—namely, the preservation of those fertilizing parts of it which decompose and are lost, during its exposure in the yards and dung-heaps, but which are preserved in the soil.

All stubble ploughing ought to be deep, certainly not less than seven inches, and, if possible, ten inches. To turn over the latter-mentioned depth, it will be necesary to yoke three horses in the plough. Shallow ploughing is useless; and good after-crops can never be

raised when this practice is followed.

The object of ploughing land for green crops at an early season is, chiefly the benefit derived from exposure of the soil to the action of the frost and air, and to keep the land dry, by affording the rain an easy bed to percolate through; in consequence of this, the land becomes much more easily worked afterwards, weeds and insects are partially destroyed, and altogether it is too important an operation to be delayed beyond the beginning of this month. Winter ploughing ought never be done when the land is in a wet state, or when snow is lying. If done when in this state the benefit of ploughing is lost, the land becomes like mortar, it retains the water, and hardens so as to render the after culture much more difficult.

water, and matters to be a summore difficult.

Ploughing Leas.—All grass lands intended to be cropped with oats ought to be ploughed early this month, if not before, commencing with the older and tougher leas. By doing so at this time, a much better covering for the seed is obtained than if the ploughing was deferred to a later period. Exposure to frost and air is also, in this case, the means by which this result is obtained. The proper size of furrow for leas is from eight to nine inches wide, by five to six inches deep. In all winter ploughing, care must be taken that surface water is not allowed to lie on the land. This will scarcely be the case on thorough-drained lands; still it is as well to prevent the possibility of water lodging on the surface, by cutting small gripes in different parts across the head ridges, and through any hollows, so that any excess of surface water may be carried quickly off into the nearest drain or ditch.

Every farmer is aware that much time is lost in ploughing short ridges; and it is, therefore, a matter of some importance that, in laying off fields, these should be as long as the general size and arrangements of the farm will admit. The following table is interesting, as it shows the comparative amount of time lost in ploughing long and short ridges. We extract this table from "Stephens's Book of the Farm"—a work from which much useful practical information will be derived:—

Ridges.	Length of ridge.	Time taken to plough one Stat. acre.	Loss of time.	Gain of time.
No. 1 ,, 2 ,, 3 ,, 4 ,, 5	78 yds. 86 ", 112 ", 118 ", 170 ",	h. m. 11 53 12 16 10 35 9 31 10 15	h. m. 1 53 2 16 0 35 0 0 0 15	h. m. 0 0 0 0 0 0 0 29 0 0

The standard of ploughing in this trial was taken at 4,840 square yards, or one statute acre in ten hours. This is one instance out of many which could be brought forward, as showing the necessity of paying attention to what may appear to be trifles, so that expenditure in time and labour may be saved.

Spade Husbandry.—It is evident that the foregoing directions for winter ploughing are only applicable to those who have a sufficient number of stout horses to do the work properly. This the small farmer does not possess; and, indeed, in the case of small farmers generally, the possession of a horse is a great evil. It induces him to scratch over his land, rather than to give it the necessary deep ploughing, because he has not the

means of working it properly; and besides this, as the horse must be maintained some way or other, it is too often the case that this is done out of what ought to be used by the family. From inability to keep them in working order, we always find horses belonging to the smaller classes of farmers to be most wretched animals, unable to drag themselves along, much less to assist in cultivating the land in a proper manner. If a beast be required by a small farmer, we would prefer using a bullock; for he can be more easily kept than a horse, will do his work as efficiently, and, when not required, can be fattened and sold, whereas the old, worn-out horse is totally worthless. For the small farmer, however, the most efficient mode of culture is by means of the spade. This simple instrument can be used under all circumstances, costs nothing for its keep, and, when properly used, is a much more efficient one in the culture of the soil than the best-appointed plough. The great importance of spade husbandry, and its complete adaptation to the case of the small farmers of Ireland, are only now beginning to be fully recognized. In allotting the size of farms, we think that they ought to be either of such a size as can be conveniently cultivated under a proper rotation of crops, by means of the spade—say five Irish acres—or that they shall be sufficiently large to give at least one pair of stout horses ample employment. There should not be any medium; for such would only cause the occupier to keep one, or, perhaps, two worthless animals, and the cultivation of such farms can never be so perfect as those cultivated entirely by spade labour, or by proper draught horses.

two worthless animals, and the cultivation of such farms can never be so perfect as those cultivated entirely by spade labour, or by proper draught horses.

Manure-making.—As the cattle are housed at this period of the year, the accumulation of manure is, of course, one point to which the attention of the farmer is directed. The site of the dung-pit ought to be as convenient as possible to the cow-houses and stables; and the best form is, when slightly concave or hollow, with a gentle slope to a certain point at one end. The bottom must be paved, and, if the dung-pit be large, there ought to be shallow centre and cross channels, so as to permit the liquid drainings to flow towards the

as to permit the liquid drainings to flow towards the latter point, at which a covered reservoir or tank, for receiving these drainings, will be constructed. If the subsoil be porous, the site of the dung-pit must be properly puddled with clay previous to being paved, otherwise the liquid will escape through the soil instead of being conveyed to the tank. The dung-pit ought to be enclosed by a wall, four or five feet high, having a gate at one end, in order to allow carts to pass in and out. Before any dung is put into the pit, the bottom ought to be covered with a layer of earth or bog-stuff, a foot or eighteen inches deep, and with weeds cut before seeding, potato haulms, or any other refuse; this will soon become a mass of rich manure. The different kinds of manure—the horse, cow, and pig dung—will then be laid equally over the whole surface, taking care that all be properly intermixed; and to facilitate this, planks should be laid in different directions, over the dung, so that there may not be any accumulation of one particular kind of manure in any one part more than in another. As the dung accumulates, a light layer of earth should be laid over all; and when this is regularly done, it will improve the quality of the heap, by preventing the escape of ammonia and other gases during the progress of fermentation, and also add to its bulk, becoming itself invaluable manure. During cold weather fermentation does not proceed so rapidly as it does at a later period of the season; still, as there is always more or less going on, it is as well to guard against loss.

more or less going on, it is as well to guard against loss. Sprinkling the surface occasionally with peat charcoal will also prevent undue fermentation and fix the ammonia, which will otherwise be constantly escaping. As the liquid accumulates in the tank, it may be taken out and poured over of the dung, which it will not only greatly enrich, but cause it also to decompose equally, and thus burning, or fire fanging at its termed, will be prevented.

prevented.

During frosty weather, the dang rich and the farm-yard ough to be applied at the made up into oblong heaps on the upper the made up into oblong heaps on the upper the made up into oblong heaps on the upper the manure can be more readily brightains a more team of decomposition in the field the property of decomposition in the field the property of the manure of decomposition in the field that the property of the manure heap is in the field than if it was at some distance. This is a point, however, which we find but little attended to. The manure is allowed to lie in the farm-yard until required, and then it is either insufficiently rotted, or has become burned up, and much valuable time is lost in conveying it to the field where it is wanted. For certain cropssuch as beans, potatoes, and carrots—fresh dung may be carried and spread at once before the stubbles are ploughed; but when intended for mangel-wurzel or turnips, it ought to be made into the oblong heaps we have mentioned. The manner of forming these heaps is as follows:—The intended site being fixed upon, let a layer of earth be laid down, of the breadth and length which it is intended to make the heap; or, if the land has been previously ploughed, let the bottom be levelled